Public Health Department Accreditation
Setting the Research Agenda

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Abstract: Health department accreditation is one of the most important initiatives in the field of public health today. The Public Health Accreditation Board (PHAB) is establishing a voluntary accreditation system for more than 3000 state, tribal, territorial, and local health departments using domains, standards, and measures with which to evaluate public health department performance. In addition, public health department accreditation has a focus on continuous quality improvement to enhance capacity and performance of health departments in order to advance the health of the population. In the accreditation effort, a practice-based research agenda is essential to build the scientific base and advance public health department accreditation as well as health department effectiveness. This paper provides an overview of public health accreditation and identifies the research questions raised by this accreditation initiative, including how the research agenda will contribute to better understanding of processes underlying the delivery of services by public health departments and how voluntary accreditation may help improve performance of public health departments.
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Introduction

The Public Health Accreditation Board (PHAB) is responsible for an initiative to create a voluntary accreditation system for more than 3000 state, tribal, territorial, and local health departments. Public health department accreditation provides the means to ensure accountability, consistency, and uniformity in the capacity and activities of health departments, advancing public health practice and improving population access to a high-performing health system. This, in turn, should contribute to improving the nation's health status. The CDC and the Robert Wood Johnson Foundation (RWJF) have invested extensive efforts and resources into the development of the PHAB and the public health accred-

itation system. However, the evidence base for accreditation in public health and, for that matter, many health-related accreditation activities, is limited at this early stage.

As governmental public health departments embrace voluntary accreditation, their capacity and quality will be better understood so that performance can be improved. Little is known about the relationship between performance management of public health departments and quality improvement activities, whether accreditation standards drive performance improvement, or whether performance improvement projects are related to increased ability to meet specific accreditation standards. These questions in no way diminish the support for accreditation; rather, they facilitate the establishment of a solid research base, which has been conspicuously absent from most accreditation systems. A research agenda is needed to continue the important work of the CDC and the RWJF in the creation of an evidence base for public health department accreditation.

This practice-based research agenda should include a wide range of issues related to public health accreditation: (1) the validity and reliability of the accreditation domains, standards, and measures; (2) the current capacity of health departments to meet accreditation standards, the variation across the nation's environmental, political, structural, and service activities, and the determinants of such variation; (3) the extent to which accreditation

is related to proximal and distal community health status; (4) the rate of diffusion of accreditation and quality improvement across public health departments; and (5) the impact of quality improvement on health department performance. Rigorous research will help build the scientific base and is vital to advancing public health department accreditation as well as health department effectiveness.

Similar to Health Services Research (HSR), Public Health Services and Systems Research (PHSSR) is a field of study that examines the organization, financing, and delivery of public health services within communities and the impact of these services on public health.[1] Although a relatively new field of research, PHSSR has emerged because of the need to understand how the national public health infrastructure and the multiplicity of organizational arrangements in public health affect health outcomes.[2] Initial work has focused on identifying the roles, functions, and resources of public health agencies,[3–6] exploring partnerships within the public health system,[5] and facilitating collaboration between public health and other sectors.[7,8]

However, with the imminent launch of a national accreditation program, the opportunity and need for research regarding public health accreditation and its impact on public health system performance is of key interest. Although the authors are directly involved in the PHAB activities and board of directors, this article represents the opinions of the authors and does not represent the board, nor has the PHAB approved the direction and concept as presented in this article. The research agenda proposed in this article offers an important new area for the field of PHSSR as the process of public health accreditation rolls out in the fall of 2011.

The research agenda advanced in this article was developed by the authors and based on the work of the PHAB Research and Evaluation Committee, on the PHSSR Panel at the 2010 Academy Health annual research meeting, and on the 2011 Keeneland PHSSR conference. This discussion proceeds in several steps. First is an overview of public health accreditation and its expected impact on public health departments as well as the public health system. Second, the article identifies and explores the research questions raised by this accreditation initiative, including how the research agenda will contribute to a better understanding of the processes underlying the delivery of services by public health departments and how voluntary accreditation may help improve the performance of public health departments. Finally, it provides guidance to those in PHSSR who are interested in and committed to improving evidence-based public health interventions.

Background

The PHAB effort is a culmination of more than 20 years of progressive innovation in public health practice prompted by the IOM's 1988 recommendation that established the core functions of public health.[8] This initial publication was followed by the creation of the 10 Essential Health Services,[9] the development of the National Public Health Performance Standard Program,[10] and the creation of the Operational Definition of a Functional Public Health Department.[11] More recently, an IOM study[10] released in 2003 called for an examination of the feasibility of public health accreditation, recommending the establishment of the national steering committee to examine the benefits of accrediting governmental public health departments. The resulting national commission, the Exploring Accreditation Project (EAP), was convened by the RWJF and the CDC in 2005 and issued its final paper in the fall of 2006.[12] The paper[13] was based on the experience of public health accreditation systems in eight different states, the positions of the major public health organizations on accreditation, and an extensive review of accreditation systems in health and social service industries, concluding that a voluntary public health accreditation program is both feasible and desirable.

In 2007, the PHAB was established by four leading national public health organizations (American Public Health Association, Association of State and Territorial Health Officials, National Association of Local Boards of Health, and the National Association of County and City Health Officials). In the past 3 years, the PHAB has made substantial progress in the development and testing of a voluntary accreditation system, supported by joint funding from the RWJF and the CDC. Accreditation will be open to health departments starting in the fall of 2011. Health department accreditation will lead, most contend, to clarification of the public's expectations of health departments through uniform performance standards, higher performance by those health departments, and increased public accountability of public health.[14]

The public health accreditation system has established domains, standards, and measures, as well as external validation through an accreditation assessment process. The 12 domains are based on the 10 Essential Health Services, and the standards and measures rely heavily on the National Public Health Performance Standards and state accreditation programs.[15] Table 1 illustrates the 12 accreditation domains. Unlike other accreditation systems, all of the components of the PHAB standards and measures have been developed with a strong emphasis on continuous quality improvement.[15]

Table 1. PHAB accreditation domains

1. Conduct assessment activities focused on population health status and health issues facing the community
2. Investigate health problems and environmental public health hazards to protect the community
3. Inform and educate about public health issues and functions
4. Engage with the community to identify and address health problems
5. Develop public health policies and plans
6. Enforce public health laws and regulations
7. Promote strategies to improve access to healthcare services
8. Maintain a competent public health workforce
9. Evaluate and continuously improve processes, programs, and interventions
10. Contribute to and apply the evidence base of public health
11. Maintain administrative and management capacity
12. Build a strong and effective relationship with governing entity

PHAB, Public Health Accreditation Board

Conceptual Framework

In a parallel effort to development of the research agenda, the PHAB research and evaluation committee also developed an evaluation logic model. The logic model in Figure 1 illustrates the hypothesized relationship among six dimensions (inputs, strategies, outputs, short-term outcomes, intermediate outcomes, and long-term outcomes) and identifies four distinct parties (the PHAB accrediting agency, the individual public health agency, stakeholders and partners, and the public health field).

Research Agenda

Research agendas are developed for a variety of purposes, including to (1) identify priorities for specific public health guidelines and measures[16]; (2) advocate for an increase in research funding as a mechanism to accelerate progress in a field[17]; (3) identify policies that are needed[18]; (4) identify gaps where additional research is needed[19,20]; (5) provide evidence for the most effective and efficient delivery of public health services; and (6) advance the research trajectory to parallel rapid knowledge development in a field, in order to better understand the importance and accurately gauge the effectiveness of the knowledge.[21–23] The PHAB research agenda encompasses all of these applications. Although the PHAB accreditation process will not directly be dependent on research findings, it will be responsive to feedback and formal evaluations both internally and from participant health departments. In addition, relevant findings will be shared with policymakers and practitioners for their use and will inform the accreditation process as appropriate.

The research questions identified by the Research and Evaluation Committee of PHAB are aligned with the logic model, which was then expanded into broader categories for the research agenda. The categories break into the following areas: inputs, strategies, outputs and processes, short-term outcomes, and long-term outcomes (Table 2 shows categories, subcategories, and research questions).

At the 2010 Academy Health meeting, numerous questions were identified by health services researchers and PHSSR researchers, including the impact and outcome of accreditation, characteristics of early/late adopters, standards and indicators, quality, and policy implications.[24] Building on this discussion, the results of "Exploring Accreditation Research and Evaluation Committee," the research agenda developed by PHAB, and the accreditation research agenda session at the 2011 Keeneland PHSSR conference, the first questions that both PHSSR and public health departments should ask include the following:

1. *The validity and reliability of the accreditation domains, standards, and measures.* Although a lengthy discussion of validity and reliability is beyond the scope of this paper, it is an important question to be focusing on as accreditation research begins. Previous efforts to address the validity and reliability of these standards have been made by the National Public Health Performance Standards Program.[25]

2. *The current capacity of health departments to meet accreditation standards and the variation across the nation, including the environmental, political, and structural determinants of such variation.* Health services research is increasingly interested in how variation in care practice affects disparate medical outcomes. This concern with variation is, in part, responsible for the publication of the Dartmouth Atlas and its use in charting those variations.[26] Similar publications seeking to examine the variation in public health services do not exist. Perhaps the work of the PHAB can provide information about the variation in public health issues across the nation.

3. *The extent to which accreditation standards are related to proximal and distal population health outcomes.* The quality of medical care is related to the traditional Donabedian paradigm of structure, process, and outcome.[27] It is appropriate that the same metaphor be adopted for public health. But this requires research to demonstrate that structure is linked to processes of care, both personal and population, and those in turn drive community health status. There are currently limited data that look at, for example, relationship of performance to outcomes.[28]
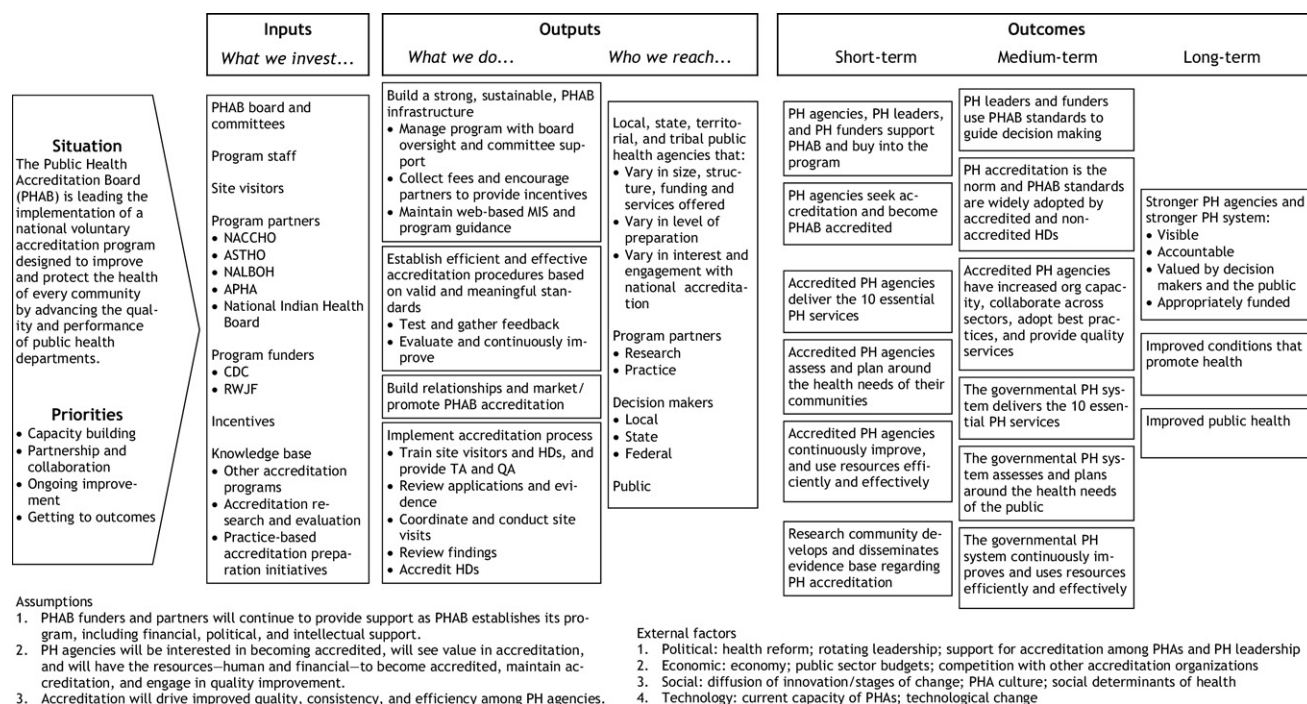
Inputs	Outputs		Outcomes		
What we invest...	What we do...	Who we reach...	Short-term	Medium-term	Long-term

Situation
The Public Health Accreditation Board (PHAB) is leading the implementation of a national voluntary accreditation program designed to improve and protect the health of every community by advancing the quality and performance of public health departments.

Priorities
- Capacity building
- Partnership and collaboration
- Ongoing improvement
- Getting to outcomes

Inputs — What we invest...

PHAB board and committees

Program staff

Site visitors

Program partners
- NACCHO
- ASTHO
- NALBOH
- APHA
- National Indian Health Board

Program funders
- CDC
- RWJF

Incentives

Knowledge base
- Other accreditation programs
- Accreditation research and evaluation
- Practice-based accreditation preparation initiatives

Outputs — What we do...

Build a strong, sustainable, PHAB infrastructure
- Manage program with board oversight and committee support
- Collect fees and encourage partners to provide incentives
- Maintain web-based MIS and program guidance

Establish efficient and effective accreditation procedures based on valid and meaningful standards
- Test and gather feedback
- Evaluate and continuously improve

Build relationships and market/promote PHAB accreditation

Implement accreditation process
- Train site visitors and HDs, and provide TA and QA
- Review applications and evidence
- Coordinate and conduct site visits
- Review findings
- Accredit HDs

Outputs — Who we reach...

Local, state, territorial, and tribal public health agencies that:
- Vary in size, structure, funding and services offered
- Vary in level of preparation
- Vary in interest and engagement with national accreditation

Program partners
- Research
- Practice

Decision makers
- Local
- State
- Federal

Public

Outcomes — Short-term

PH agencies, PH leaders, and PH funders support PHAB and buy into the program

PH agencies seek accreditation and become PHAB accredited

Accredited PH agencies deliver the 10 essential PH services

Accredited PH agencies assess and plan around the health needs of their communities

Accredited PH agencies continuously improve, and use resources efficiently and effectively

Research community develops and disseminates evidence base regarding PH accreditation

Outcomes — Medium-term

PH leaders and funders use PHAB standards to guide decision making

PH accreditation is the norm and PHAB standards are widely adopted by accredited and non-accredited HDs

Accredited PH agencies have increased org capacity, collaborate across sectors, adopt best practices, and provide quality services

The governmental PH system delivers the 10 essential PH services

The governmental PH system assesses and plans around the health needs of the public

The governmental PH system continuously improves and uses resources efficiently and effectively

Outcomes — Long-term

Stronger PH agencies and stronger PH system:
- Visible
- Accountable
- Valued by decision makers and the public
- Appropriately funded

Improved conditions that promote health

Improved public health

Assumptions
1. PHAB funders and partners will continue to provide support as PHAB establishes its program, including financial, political, and intellectual support.
2. PH agencies will be interested in becoming accredited, will see value in accreditation, and will have the resources—human and financial—to become accredited, maintain accreditation, and engage in quality improvement.
3. Accreditation will drive improved quality, consistency, and efficiency among PH agencies.

External factors
1. Political: health reform; rotating leadership; support for accreditation among PHAs and PH leadership
2. Economic: economy; public sector budgets; competition with other accreditation organizations
3. Social: diffusion of innovation/stages of change; PHA culture; social determinants of health
4. Technology: current capacity of PHAs; technological change

Figure 1. Conceptual framework for public health accreditation
APHA, American Public Health Association; ASTHO, Association of State and Territorial Health Officials; HD, health department; MIS, management information systems; NACCHO, National Association of County and City Health Officials; NALBOH, National Association of Local Boards of Health; PH, public health; PHA, public health accreditation; PHAB, public health accreditation board; QA, quality assessment; RWJF, Robert Wood Johnson Foundation; TA, technical assistance

This is an area that needs substantial attention, and the role of accreditation in requiring health departments to provide documentation that they are using evidence-based intervention should be evaluated and utilized, much as the Healthcare Effectiveness Data and Information Set is included in the National Committee for Quality Assurance process.

4. *The rate of diffusion of accreditation and quality improvement across public health departments.* The classic work of Everett Rogers on information diffusion clarified the issues surrounding the success of the cooperative extension programs, but more importantly, pointed the direction for success in achieving diffusion of innovative and productive change in environments that are inherently static and resist change, not unlike the traditional health department.[29]

5. *The impact of the science of quality improvement on health department performance.* As already mentioned, continuous quality improvement is a cornerstone of the accreditation process. The advent of two papers from the IOM, *To Err Is Human* and the subsequent *Crossing the Quality Chasm*, ushered in a major new focus of medical care on safety and quality of care provided.[30,31] This development has seen the invention of new approaches to ensuring quality of care in the medical care sector, as well as borrowing techniques in quality management from other sectors, such as Six Sigma,[32,33] lean,[34] and process design.[35] Although this activity has created a revolution in the care of patients in the medical care sector, with increasing focus on using quality as an indicator for reimbursement,[36,37] a similar situation has not occurred in the public health sector, and only a small body of new research approaches has been applied to improving public health processes through performance improvement methods and techniques.[20,38] The PHAB's development and the focus of quality improvement in the accreditation standards and measures may well represent the initiative to move the public health system in the same direction of transformational change that the medical care sector is now experiencing.[20]

Rigorous research based on these five questions will help build the scientific base and is vital to advancing public health department accreditation. In addition, it is not yet known the extent to which health departments will be able to achieve the accreditation standards. This is another important area of research to determine what factors allow some health departments to achieve accreditation in contrast to others that may not be able to achieve the standards and, more importantly, what can be done to improve health department operations in order to achieve the specified performance standards.

Table 2. Research questions of the research and evaluation committee of PHAB

INPUTS
Characteristics related to achievement of accreditation
How do characteristics of non-accredited health departments differ from those of accredited health departments in terms of leadership, structure, budget, and workforce?
What characteristics of health departments make them more or less likely to apply or successfully achieve accreditation?
Facilitators/barriers to seeking accreditation
What are the barriers to health department participation in accreditation?
How do applicants for voluntary accreditation differ from non-applicants?
Does funding to local health departments make a difference in the ability/interest in seeking accreditation?
How is accreditation funded by health departments seeking it? What role do foundations and other nongovernmental sources play?
What characteristics of health departments make them more or less likely to seek accreditation?
Preparation for accreditation
What preparation activities for accreditation are related to successfully achieving accreditation or readiness for accreditation?
Are jurisdictions that engage in broader systems initiatives such as National Public Health Performance Standards Program (NPHPSP); Mobilizing for Action through Planning and Partnerships (MAPP); and State Health Improvement Plan (SHIP) better positioned to seek and attain accreditation?
Are health departments that emphasize preparedness and readiness, such as Project Public Health Ready, better positioned to seek and attain accreditation?
Are health departments with well-developed quality-improvement systems better prepared to seek accreditation?
STRATEGIES
Technical assistance
What supports do state and local health departments need to prepare for accreditation?
Does preparation for accreditation encourage the adoption of evidence-based interventions?
State role in accreditation
How can participation in accreditation at the state and local levels be most effective?
What actions might state health departments do to support (or hinder) local health department participation?
Are the answers to these questions different for centralized versus decentralized systems?
Incentives
What are the potentially different incentives for both state and local health department participation?
What role would/could states play in providing incentives for their local health departments' participation in accreditation?
OUTPUTS/PROCESSES
Standards and measures
Do the PHAB standards capture what matters for evaluating the performance of health departments?
Do the standards adequately capture the critical work of health departments?
Does accreditation divert attention away from important health department activities?
Has the bar been set appropriately? Too high? Too low? How can we tell whether the bar is set at the right level?
Are there standards that are missing or which could be omitted?
PHAB performance
How does the volume of agency participation and applications affect PHAB's ability to be an effective accrediting organization?
Is the accreditation process effective and efficient?
Is the overall assessment process as effective and least burdensome as possible?

Table 2. Research questions of the research and evaluation committee of PHAB *(continued)*

Costs
What are the full costs of accreditation?
What are the funding sources for accreditation?
Who will gain from accreditation; is there a price sensitivity?

Benefits of accreditation
Does accreditation promote or hinder the role of a health department in building a public health system?
Has the accreditation program demonstrated value to health departments?
To what extent does accreditation have value for programmatic areas within the health department?
To what extent does accreditation have value for federal programmatic initiatives?
Does accreditation benefit exceed cost?

Assessment process: self-assessment and site visit
To what extent does the self-assessment process predict the assessment review process?
To what extent is the site visit a meaningful part of the process (value added)?

SHORT-TERM OUTCOMES

Health department operations and performance
Does accreditation influence or change the use of resources by health departments?
Does accreditation increase the consistency of what health departments do (better or worse)?
Is there greater accountability for accredited health departments?
Does accreditation have an effect on health department workforce (e.g., morale, productivity, workforce retention/satisfaction, achievement of competencies, and seeking advanced degrees)?
Does accreditation enhance progress in achieving the health department strategic plan? The state/community health improvement plan?
Does accreditation enhance progress in achieving Healthy People objectives or other federal benchmarks?
Does accreditation lead to improved performance, and ultimately to improved public health?
Are health departments that collaborate with schools of public health more likely to achieve accreditation or meet certain standards?
How are public health priorities set in times of constricted funding?
What are the relationships and models of academic and public health practice as impacted by accreditation?

Infrastructure resources and other support
Do health departments that go through accreditation strengthen their financial status (or other domains)?
Does accreditation improve capacity and performance of health departments?

Quality improvement
Does accreditation help build the evidence base for quality improvement in public health?
Does accreditation encourage the adoption of best practices?
What is the relationship between accreditation and quality improvement in terms of affecting health department performance: do they act together, or do health departments pursue them separately?

Accreditation program outcomes
What are the best metrics to determine health department advances in level of performance?
Does PHAB accreditation operate as intended to promote quality improvement?
Are some essential services more affected by accreditation than others, and if so, why?

(continued on next page)

Table 2. *(continued)*

LONG-TERM OUTCOMES
Health departments
Does accreditation enhance progress in achieving the health department strategic plan? The state/community health improvement plan?
Does accreditation catalyze changes in health department activities, responsibilities, or structure at the state and local level, such as regionalization?
Health outcomes
Does accreditation have an impact on health outcomes?
Are some health outcomes more readily influenced by accreditation?
Does accreditation lead to improved health department performance, and ultimately to improved public health?
Accreditation programs
What are the unintended consequences of accreditation?
Is the impact of accreditation altered by whether a national or state (equivalent?) process is pursued? By whether it is voluntary or mandatory? By whether it is pursued statewide, and whether the state and locals both/all seek accreditation?

PHAB, Public Health Accreditation Board

Research can also help identify some of the potential downsides of the accreditation process, such as cost of accreditation and potential negative effects if underfunded agencies are unable to achieve accreditation, as well as strategies to address these issues. The research agenda for public health accreditation should be guided by the five principles in Table 3. These guiding principles represent fundamental values underlying all research into public health accreditation. This research agenda, combined with the guiding principles, will lead to a better understanding of the relationship of accreditation of public health departments, quality improvement, and capacity of health department performance with health status outcomes.

Table 3. Guiding principles for the public health accreditation research agenda

1. The involvement of all stakeholders in identifying, prioritizing, and pursuing research questions is essential.
2. Data developed from the accreditation process, after appropriate de-identification has occurred, should be available to researchers to address the research agenda.
3. The research involving accreditation should inform and be informed by the field of PHSSR.
4. The results of the research should be used to improve the public health department, system, accreditation standards and processes and efforts to improve the delivery of public health services.
5. Research assessing accreditation should include a search for unintended positive and negative consequences.

PHSSR, Public Health Services and Systems Research

New Research Methods

Among the dominant implications for PHSSR and research related to the impact of public health agency accreditation is the need for new research methodologies and approaches. Although substantial knowledge has been gained exploring inputs and outcomes in the public health system, the public health agency itself is largely unknown and considered a black box.[1] A major reason for this limitation is the unsuitability of traditional research methodologies. Substantial momentum has been generated recently to apply the science of improvement and its related methodologies, which may be better suited than the science of discovery for research, into public health accreditation and quality improvement.[29,39]

Quality Improvement

It has been widely recognized that better methods are needed to improve public health process performance and outcomes. Several major initiatives have been underway over the last 10 years to introduce quality improvement techniques and methods into public health. These include the *Turning Point* initiative,[40] the National Public Health Performance Standards Program,[12] the Public Health Foundation Quality Improvement Program,[41] and numerous programs supported by the RWJF and the CDC, including the Multi State Learning Collaboratives and the National Public Health Improvement Initiative.[42–44] The methods and techniques of process improvement constitute a highly relevant approach to exploring the inner functioning of the public health

department to better understand how to improve population health status.

Conclusion

Several examples were identified of the proposed public health accreditation research that needs to be done, including identifying priorities for practice and policy, providing evidence for best practices, and developing knowledge in the field. Such research needs to be conducted from a variety of perspectives, including academicians, state and local health departments, federal agencies, and other funders. Perhaps the most important implication for a PHAB research agenda is to establish how and in what way accreditation affects performance. Specifically, how does the process of preparing for accreditation result in improved performance, as measured by efficiencies, economies, impact on outputs, and changes in health outcomes of a population?

Two major papers[45,46] have spurred development of a national research agenda to help guide Public Health Services and Systems Research. In one of those research agendas, more than half of the priorities are congruent with the research questions raised by the PHAB initiative.[2] The research agenda developed in this article represents an important element of this recent emphasis on PHSSR. Attention to this research agenda becomes more pressing in view of the rapid expansion expected in health department accreditation across the nation, as both the PHAB and the RWJF have established a goal that by 2015, close to 60% of the nation's population will be served by an accredited health department.[47,48] An increase in the proportion of accredited state, tribal, and local health departments is also included as an objective within *Healthy People 2020*.[49]

Although enactment of the Patient Protection and Affordable Care Act (PPACA) of 2010 substantially improves access to the healthcare delivery system, expanded coverage alone will not make this a healthy nation.[50] The PHAB accreditation strategy complements the health reform act by focusing explicitly on how health department performance affects population health. The PPACA requires the creation of the Patient-Centered Outcome Research Institute, a public–private nonprofit enterprise charged with determining what works in health care and public health.[51]

The proposed research agenda should be incorporated as a leading priority in the newly formed Patient-Centered Outcome Research Institute to facilitate an adequate focus on health department performance, the effect of accreditation, and the health of the population. As public health department accreditation progresses across the nation, it will be increasingly important to articulate an explicit set of benchmarks that will enable researchers to evaluate the impact and stakeholders to assess the desirability of accreditation. Readers are encouraged to access the Public Health Accreditation Board website, www.phab.org, and that of the National Coordinating Center for Public Health Services and Systems Research, www.publichealthsystems.org, for additional information.

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